

ABSTRACT OF THE DISCLOSURE

One or more methods and systems of improving performance and reducing the size of a translation lookaside buffer are presented. In one embodiment, the method comprises using a bit obtained from a virtual page number to store even and odd page frame numbers into a single page frame number field of a miniature translation lookaside buffer (mini-TLB). In one embodiment, even and odd page frame number fields are consolidated into a single page frame number field. In one embodiment, the mini-TLB facilitates the use of a buffer or memory of reduced size. Furthermore, in one or more embodiments, aspects of the invention may be found in a system and method that easily incorporates and adapts the use of existing control processor instruction sets or commands of a typical translation lookaside buffer.